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U.S. DISTRICT COURT
N.D. OF ALABAMA

UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ALABAMA
SOUTHERN DIVISION

STEYR ARMS, INC.,	}	
	}	
Plaintiff,	}	
	}	
v.	}	**Case No.: 2:15-cv-01718-MHH**
	}	
BERETTA USA CORP.,	}	
	}	
Defendant.	}	

MEMORANDUM OPINION

In this patent infringement action, plaintiff Steyr Arms, Inc. alleges that defendant Beretta USA Corporation infringes the sole claim of U.S. Patent No. 6,260,301, entitled "Pistol, Whose Housing Is Composed Of Plastic" ("the '301 Patent"). (Doc. 1, ¶ 7; Doc. 1-1, p. 1). Steyr and Beretta have filed cross-motions for summary judgment on Steyr's patent infringement claim. (Doc. 45; Doc. 61). This memorandum opinion addresses both motions.

I. Summary Judgment Standard

"The court shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). To demonstrate that there is a genuine dispute as to a material fact that precludes summary judgment, a party opposing a motion for summary judgment must cite "to particular parts of materials in the record,

including depositions, documents, electronically stored information, affidavits or declarations, stipulations (including those made for purposes of the motion only), admissions, interrogatory answers, or other materials." Fed. R. Civ. P. 56(c)(1)(A). "The court need consider only the cited materials, but it may consider other materials in the record." Fed. R. Civ. P. 56(c)(3). When considering a summary judgment motion, a district court must view the evidence in the record and draw reasonable inferences in the light most favorable to the non-moving party. *Asalde v. First Class Parking Sys. LLC*, 898 F.3d 1136, 1138 (11th Cir. 2018).

"'The standard of review for cross-motions for summary judgment does not differ from the standard applied when only one party files a motion, but simply requires a determination of whether either of the parties deserves judgment as a matter of law on the facts that are not disputed.'" *Alabama Mun. Ins. Corp. v. Scottsdale Ins. Co.*, 297 F. Supp. 3d 1248, 1252 (N.D. Ala. 2017) (quoting *S. Pilot Ins. Co. v. CECS, Inc.*, 52 F. Supp. 3d 1240, 1242–43 (N.D. Ga. 2014)) (citing in turn *Am. Bankers Ins. Group v. United States*, 408 F.3d 1328, 1331 (11th Cir. 2005)). A district court will not grant summary judgment when the parties file cross-motions for summary judgment "unless one of the parties is entitled to judgment as a matter of law on facts that are not genuinely disputed." *United States v. Oakley*, 744 F.2d 1553, 1555 (11th Cir. 1984) (quoting *Bricklayers Int'l Union, Local 15 v. Stuart Plastering Co.*, 512 F.2d 1017, 1023 (5th Cir. 1975)).

II. Background

A. The ’301 Patent

Steyr owns by assignment the ’301 Patent, which is directed to a pistol with a housing composed of plastic and with a removable “multifunction metal part” that is inserted into the plastic housing. *See* U.S. Patent No. 6,260,301 (filed Aug. 13, 1999). According to the patent specification, the invention claimed in the ’301 Patent is an improvement over the prior art because all of the moving parts for the trigger mechanism can be mounted on the multifunction metal part before the part is inserted into the plastic housing. *Id.*, col. 1 lines 47–51, col. 2 lines 52–64. The multifunction metal part is secured in the plastic housing by a shaft that is inserted through holes in the housing and corresponding holes in the multifunction part. *Id.*, col. 1 lines 62–67, col. 2 lines 43–47, col. 4 lines 13–16. The multifunction metal part is further secured in the housing by a projection from the end of the multifunction part that fits in a recess in the rear wall of the housing. *See id.*, col. 2 lines 39–42, col. 4 lines 16–18.

The ’301 Patent issued from an application filed on August 13, 1999. *Id.* The original application for the patent contained four claims. (*See* Doc. 46-3, p. 4). During the prosecution of the patent application in the PTO, the patent examiner rejected all four claims in the application on the grounds that they were indefinite and anticipated by three prior U.S. patents. (Doc. 46-3, pp. 4–9).

In response to the examiner's rejection, the applicant deleted claims 2 and 3 in the application and amended claim 1 to incorporate the limitations from those claims. (Doc. 46-3, pp. 13, 15). Specifically, the applicant added the following limitations to claim 1: "said multifunction metal part and housing are each provided with a transverse hole which receives a shaft for connecting the housing and the multifunction metal part together, and wherein the housing has a rear wall which is provided with a recess for receiving a projection on the multifunction metal part." (Doc. 46-3, p. 13). The applicant provided that "[c]laim 1 now sets forth with specificity the details for supporting the multifunctional metal part in the housing and this comprises a shaft and projections on the multifunction metal part which interact with the rear wall of the housing." (Doc. 46-3, p. 15). The applicant also amended claim 4 by adding the word "control" before the phrase "means for locking a barrel in the barrel slide." (Doc. 46-3, pp. 13, 15).

Following those amendments, the examiner rejected amended claim 1 on the grounds that it was anticipated by a prior U.S. patent and found that amended claim 4, which incorporated all of the limitations of amended claim 1, would be allowed to issue if the applicant made a specific revision to the claim. (Doc. 46-3, pp. 23–24). The examiner rejected amended claim 4 as indefinite, finding that "[i]n claim 4, line 3, the phrase 'a barrel' should be claimed as 'said barrel' if the previously claimed barrel is intended," and the examiner noted that "[c]laim 4 should be

allowable if rewritten to overcome the rejection . . . ." (Doc. 46-3, pp. 23–24). The patent applicant made the required revision and amended claim 1 to incorporate the limitations that had been contained in amended claim 4. (Doc. 46-3, pp. 27–28). Specifically, the applicant incorporated the following limitation into claim 1: "the multifunction metal part includes control means for locking said barrel in the barrel slide." (Doc. 46-3, p. 28).

Based on those amendments, the '301 Patent issued on July 17, 2001 with a single claim:

> 1. A pistol comprising a housing; a barrel slide movably mounted on the housing for movement in a firing direction with respect to a barrel; and a trigger mechanism located, at least in part, within the housing, the improvement which comprises a multifunction metal part removably insertable within said housing, said multifunction metal part being provided with guides for the barrel slide and means for supporting the trigger mechanism, said multifunction metal part and housing are each provided with a transverse hole which receives a shaft for connecting the housing and the multifunction metal part together, the housing has a rear wall which is provided with a recess for receiving a projection on the multifunction metal part the multifunction metal part includes control means for locking said barrel in the barrel slide.

'301 Patent, col. 4, lines 5–20.

The parties disputed the construction of three limitations included in the claim: (1) "means for supporting the trigger mechanism"; (2) "the multifunction metal part includes control means for locking said barrel in the barrel slide"; and (3) "housing has a rear wall which is provided with a recess for receiving a projection on the multifunction metal part." (*See* Doc. 40, p. 11). On April 19, 2018, the Court

entered its Memorandum Opinion and Claim Construction Order, which construed the claim limitations "means for supporting the trigger mechanism" and "the multifunction metal part includes control means for locking said barrel in the barrel slide." (Doc. 40, pp. 22–23, 29). The Court declined to construe the claim limitation "housing has a rear wall which is provided with a recess for receiving a projection on the multifunction metal part" because the meaning of that limitation is clear on its face. (Doc. 40, pp. 31–32).

The Court construed the claim limitation "means for supporting the trigger mechanism" as a means-plus-function limitation under 35 U.S.C. § 112, ¶ 6 with the following function and structure:

> The claimed function is supporting the trigger mechanism.
>
> The corresponding structure for the claimed function, with reference to Figures 1-6 of the '301 Patent, is:
>
> - a bearing pin (21) for mounting a trigger (20), which is inserted in the multifunction part (10);
> - a pin (23) for supporting the spring of a trigger safety device (22), which is mounted in multifunction part (10);
> - a pin (24) for supporting another moving part (for example another safety device), which is mounted in multifunction part (10);
> - a pivoting pin (25) inserted or mounted in the rear part of the multifunction part (10);
> - a guide (27) for a release lever (26), which is formed on the multifunction part (10); and
> - various holes provided in the two side parts (30, 31) of the multifunction part (10), to be precise a hole (38) for the bearing pin (21), a hole (39) for the pin (23), a hole (40) for the other pin

> (24) in the front part and, in the rear part, a hole (41) for the pivoting pin (25) and a hole (42) for a further part of the trigger mechanism;
> - and equivalents thereof.

(Doc. 40, pp. 22–23).

The Court construed the claim limitation "the multifunction metal part includes control means for locking said barrel in the barrel slide" as a means-plus-function limitation under § 112, ¶ 6 with the following function and structure:

> The claimed function is locking the barrel in the barrel slide.
>
> The corresponding structure for performing the claimed function, with reference to Figures 1-6 of the '301 Patent, is:
>
> > a bridge (33) that connects the right-hand and left-hand sides (30, 31) of the multifunction metal part (10) and that engages, or interacts with, the control attachments (4) on the barrel (3) to lock the barrel in the barrel slide, and equivalents thereof.

(Doc. 40, p. 29).

B. The Accused Beretta Pico

Beretta manufactures and sells a pistol under the trade name Pico, which Steyr asserts literally infringes Claim 1 of the '301 Patent. Like the pistol described in the '301 Patent, the Pico utilizes a replaceable housing that has a grip, trigger guard, and means to support the firing mechanisms insertable into the housing. (Doc. 64-2, p. 14).

A metal chassis insertable into the grip housing supports the trigger mechanism in the Pico. (*See* Doc. 64-2, pp. 34, 39–45, 52–53). A trigger, trigger

bar, trigger pin, trigger spring, slide catch, slide catch spring, and disconnect pin are assembled on the chassis. (Doc. 64-2, pp. 39–45). The chassis assembly is inserted into the back end of the grip housing and attached to the grip housing with a removable disassembly pin. (Doc. 64-2, pp. 35–36). The Court explains the specific structure and function of these components later in this memorandum opinion when analyzing Steyr's claim that the Pico utilizes an infringing "means for supporting the trigger mechanism."

The Pico utilizes a cam-ramp, tilt-barrel, short recoil firing and locking system. (Doc. 64-2, pp. 17–18). When the Pico is fired, recoil energy causes the barrel and barrel slide to move rearward; the barrel momentarily stops and tilts downward; the slide continues moving rearward and ejects the fired case; a recoil spring then forces the slide forward, feeding the next cartridge from the magazine into the firing chamber; and then the barrel raises back into the slide and moves forward with the slide, returning to its forward position locked in the slide. (Doc. 64-2, pp. 17–18). The Court explains how specific parts of the Pico function in the firing and locking operation later in this memorandum opinion when analyzing Steyr's claim that the Pico infringes the "the multifunction metal part includes control means for locking said barrel in the barrel slide" limitation.

C. The Parties' Cross-Motions for Summary Judgment

In its "Motion for Partial Summary Judgment of Non-Infringement," Beretta

contends that no genuine dispute of material fact exists as to Steyr's claim that the Pico infringes the '301 Patent and that Beretta is entitled to judgment in its favor on that claim as a matter of law. (Doc. 45). According to Beretta, the undisputed evidence demonstrates that the Pico lacks several necessary elements to support an infringement claim, and that the Pico lacks identity or equivalence of function and structure with the "means for supporting the trigger mechanism" and the "the multifunction metal part includes control means for locking said barrel in the barrel slide" claim limitations. (*See* Doc. 48).

In its "Motion for Summary Judgment of Infringement of U.S. Patent No. 6,260,301," Steyr contends that no genuine dispute of material fact exists as to its claim that the Pico infringes the '301 Patent and that it (Steyr) is entitled to judgment in its favor on that claim as a matter of law. (Doc. 61). According to Steyr, it is undisputed that every claim limitation in the '301 Patent is literally present in the Pico, specifically the "means for supporting the trigger mechanism" and the "the multifunction metal part includes control means for locking said barrel in the barrel slide" claim limitations. (*See* Doc. 62).

The parties have fully briefed the cross-motions for summary judgment.

III. Analysis

Resolving a claim of patent infringement involves a two-step inquiry. *Bayer AG v. Elan Pharm. Research Corp.*, 212 F.3d 1241, 1247 (Fed. Cir. 2000). "First,

the claims are construed, a question of law in which the scope of the asserted claims is defined. . . . Second, the claims, as construed, are compared to the accused device. . . . This is a question of fact." *Bayer AG*, 212 F.3d at 1247 (citations omitted). The Court already has construed the single claim in the '301 Patent, so this case is at step two.

An accused device may infringe a means-plus-function limitation literally under 35 U.S.C. § 112, ¶ 6, or infringe such limitation under the doctrine of equivalents. *Kemco Sales, Inc. v. Control Papers Co.*, 208 F.3d 1352, 1364 (Fed. Cir. 2000). Steyr concedes that it accuses Beretta of literal infringement under § 112, ¶ 6, not infringement under the doctrine of equivalents. (Doc. 71, p. 13).

Literal infringement occurs under § 112, ¶ 6 if the relevant structure in the accused device (1) "perform[s] the identical function recited in the claim"; and (2) is "identical or equivalent to the corresponding structure in the specification." *Welker Bearing Co. v. PHD, Inc.*, 550 F.3d 1090, 1099 (Fed. Cir. 2008) (quotation omitted). At the second step of the literal infringement analysis, "[s]tructural equivalence under § 112, ¶ 6 is met only if the differences are insubstantial, . . . that is, if the assertedly equivalent structure performs the claimed function in substantially the same way to achieve substantially the same result as the corresponding structure described in the specification." *Odetics, Inc. v. Storage Tech. Corp.*, 185 F.3d 1259, 1267 (Fed. Cir. 1999) (internal citation omitted). The

structural equivalence analysis "requires a determination of whether the 'way' the assertedly substitute structure performs the claimed function, and the 'result' of that performance, is substantially different from the 'way' the claimed function is performed by the 'corresponding structure, acts, or materials described in the specification,' or its 'result.'" *Odetics*, 185 F.3d at 1267.

The literal infringement analysis does not require a component-by-component analysis between the claim and the accused device. *Odetics*, 185 F.3d at 1267–68. Every part disclosed in a patent does not have to have a corresponding part in the accused device to demonstrate literal infringement. *Odetics*, 185 F.3d at 1268. Rather, a structure, possibly comprised of any number of individual components, corresponding to the claimed function is the claim limitation, and that structure must have an equivalent structure in the accused device to support a finding of infringement. *Odetics*, 185 F.3d at 1268 (approving of how the Federal Circuit in *Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus., Inc.*, 145 F.3d 1303 (Fed. Cir. 1998), found that wheels and a skid plate in concrete-cutting devices supported the surface of concrete in different ways without "deconstruct[ing] the skid plate structure into component parts in order to analyze equivalence"); *Al-Site Corp. v. VSI Int'l, Inc.*, 174 F.3d 1308, 1321–22 (Fed. Cir. 1999) (upholding a jury finding that a hanging tag made of a mechanically fastened loop that secured eyeglasses in

a device hanging from a display rack was equivalent to a hanging tag made of two arms with holes that performed the same function).

The "all elements" rule applies to an analysis of § 112, ¶ 6 equivalents. *Chiuminatta*, 145 F.3d at 1311. The "all elements" rule "requires that *each* claim limitation be met by an equivalent element in the accused device." *Chiuminatta*, 145 F.3d at 1311 (emphasis added). The "all elements" rule requires courts to assess equivalence "on a limitation-by-limitation basis, rather than from the perspective of the invention as a whole," and prohibits a finding of equivalence that would effectively remove a limitation from the claim. *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 469 F.3d 1005, 1017 (Fed. Cir. 2006).

Here, the parties dispute literal infringement of two means-plus-function limitations covered by Claim 1 of the '301 Patent as construed by the Court: (1) "means for supporting the trigger mechanism"; and (2) "the multifunction metal part includes control means for locking said barrel in the barrel slide." The Court addresses each claim limitation in turn. But first, the Court must resolve objections to witness declarations submitted with each party's motion for summary judgment.

A. Evidentiary Disputes

1. Jason Kellogg's Declaration

Beretta submitted with its motion for summary judgment a declaration from its Senior Manager of Research and Development, Jason Kellogg. (Doc. 46-12). At

the summary judgment stage, Beretta offers Mr. Kellogg as a fact witness, not as an expert witness. (Doc. 72-1, pp. 3–4, tpp. 8–9). In his declaration, Mr. Kellogg explained his understanding of the structures required by the Court's Claim Construction Order. (Doc. 46-12, pp. 4–6, ¶¶ 8, 10–11). He also described the relevant component parts of the Pico and explained how the Pico firing and locking system functions. (Doc. 46-12, pp. 5–7, ¶¶ 9, 12–14). And he identified structures in the Court's Claim Construction Order that are not present in the Pico. (Doc. 46-12, pp. 5, 7–8, ¶¶ 9, 15).

Steyr argues that Mr. Kellogg's declaration is inadmissible expert testimony. (Doc. 71, pp. 15–18). Steyr contends that Mr. Kellogg bases his opinions on "scientific, technical, or other specialized knowledge," such that he must be – but is not -- qualified as an expert to testify under Rule 702 of the Federal Rules of Evidence. (Doc. 71, p. 15). Steyr asserts that Mr. Kellogg is not qualified as an expert because, at his deposition, Mr. Kellogg testified that he did not understand why a court issues a claim construction order; did not determine whether products infringe a patent; did not know why he used the language "must have and requires" in his declaration because the Court's Claim Construction Order did not use that language; did not know the meaning of "and equivalents thereof" as used in the Court's Claim Construction Order; and did not understand the meaning of the Court's finding that the construction of "means for supporting the trigger

mechanism" could not include the trigger, the spring of the trigger safety device, and the release lever. (Doc. 71, pp. 15–17). Finally, Steyr disputes the accuracy of some of Mr. Kellogg's opinions about how the Pico functions. (Doc. 71, pp. 17–18).

Mr. Kellogg's declaration is not inadmissible expert testimony; it is admissible lay witness testimony. Mr. Kellogg's declaration demonstrates that he has extensive personal knowledge of and experience with the Pico and other Beretta products. (*See* Doc. 46-12, pp. 2–3, ¶¶ 2–6). So his declaration provides relevant information about the structures of the Pico. He compared his knowledge of the Pico with his understanding of the '301 Patent and the Court's Claim Construction Order, reaching factual opinions as to components missing from the Pico. He did not offer opinions about infringement or the legal implications of the Court's Claim Construction Order. And Steyr's disagreement with the accuracy of Mr. Kellogg's testimony demonstrates a potential factual dispute, not grounds for eliminating evidence at the summary judgment stage. So the Court will consider Mr. Kellogg's declaration.

2. *David Byron's Declaration*

Steyr submitted with its motion for summary judgment a declaration from its expert witness, David Byron. (Doc. 64). Beretta does not contest Mr. Byron's extensive qualifications to testify as an expert on firearms. But Beretta objects to paragraphs 5, 21–22, and 26–29 of Mr. Byron's declaration as conclusory and

speculative. (Doc. 73, pp. 6–12).

In paragraph 21, Mr. Byron testifies: "[t]he Beretta Pico 'chassis' (multifunction metal part) duplicates [claim elements of the trigger mechanism] using holes and pins and a guide on the chassis to support the trigger mechanism on the chassis as shown in the photos above and below." (Doc. 64, p. 17, ¶ 21). Beretta asserts that Mr. Byron's testimony is conclusory and lacks any probative value because "he provides no explanation of what or where these alleged pins and holes are in the Pico handgun, how they allegedly function, or any particularized testimony as to whether the differences in these structures are insubstantial from the construed (i.e., required) claim elements or are interchangeable to any degree." (Doc. 73, p. 8) (emphasis omitted). The Court disagrees.

Mr. Byron identifies what and where the alleged pins and holes are in the Pico handgun, referencing part numbers and locations as provided in the Pico instruction manual. (Doc. 64, p. 16, ¶ 21). He describes how those pins and holes allegedly function, showing where the pins are inserted through the chassis and opining that those pins attach the trigger mechanism to the chassis. (Doc. 64, pp. 17–18, ¶ 21). And he reaches a non-conclusory opinion about the insubstantiality of differences between the claim limitation and the Pico based on his testimony about the pins and holes in the Pico. (Doc. 64, p. 18, ¶ 21).

In paragraph 22, Mr. Byron testifies that "the [Pico] trigger pin (PC No. 9) inserted into holes in the chassis (PC No. 3) and guide to support the trigger mechanism is equivalent to the corresponding structure set forth in the claim as construed by the Court." (Doc. 64, pp. 18–19, ¶ 22). Beretta contends that this and similar opinions in paragraph 22 are conclusory because Mr. Byron "attempts no analysis of what the alleged holes and pins are, where they are, or how they supposedly work or function. Further, while he offers the naked conclusion that the structures are 'insubstantially different' from allegedly similar required claim structures, he offers no particularized analysis as to why or how that is so." (Doc. 73, p. 9) (emphasis omitted). The Court disagrees.

As explained above, Mr. Byron testifies as to the what, where, and how of the pins and holes in the Pico. And he explains that he considers the structures "insubstantially different" from corresponding structures in the '301 Patent because of how the pins and holes attach the trigger mechanism to the chassis in the Pico and because he believes the trigger bar forms the release lever in the Pico trigger mechanism. (Doc. 64, pp. 16, 19–20, ¶¶ 21–22). So his opinion of insubstantial differences is not merely conclusory.

Also in paragraph 22, Mr. Byron testifies: "[w]hether you use one pin to support a simple trigger mechanism or a number of pins to support a more complicated trigger mechanism would be obvious to a person skilled in designing a

pistol and is nothing more than an insubstantial difference." (Doc. 64, p. 20, ¶ 22). Beretta contends that this opinion lacks support because Mr. Byron "provides no analysis, such as an investigation of existing art for any time period or the motivation for making such a choice, for his stated design-choice conclusion." (Doc. 73, p. 9). The Court disagrees. Mr. Byron is an expert on and inventor of firearms and firearms-related products, so his expert opinion on design choice in paragraph 22 needs no more detailed explanation to earn the Court's consideration at the summary judgment stage.

In paragraph 26, Mr. Byron testifies that the Pico uses a disconnect pin "to lock the barrel in the barrel slide" which is in an "identical position" to the bridge (33) in the '301 Patent claim. (Doc. 64, pp. 25–27, ¶ 26). From these observations, Mr. Byron testifies that "there is identity of function" between the Pico and the '301 Patent claim and "this first step [of the literal infringement test] is satisfied." (Doc. 64, p. 27, ¶ 26). Beretta objects to paragraph 26 as conclusory because "Byron makes this leap without evidence that he studied the function of the Pico's disconnect pin or analyzed how the disconnect pin locks a barrel in a barrel slide (as opposed to blocking a barrel). Indeed, Byron makes no statement that he analyzed the relevant functioning of the parts of the Pico pistol when in action, instead relying on the Pico instruction manual and other literature that accompanied his purchase of a Pico." (Doc. 73, p. 10) (emphasis omitted). The Court disagrees.

Mr. Byron's opinion that the disconnect pin in the Pico locks the barrel in the barrel slide is not conclusory; he referenced diagrams from the '301 Patent, pictures he took of the Pico chassis and disconnect pin, and the Pico instruction manual to support his opinion. (*See* Doc. 64, pp. 25–27, ¶ 26). Beretta and a factfinder might disagree with Mr. Byron's opinion that the disconnect pin locks the barrel, but his opinion is not simply conclusory.

In paragraphs 27–29, Mr. Byron explains why he believes that the disconnect pin in the Pico is structurally equivalent to the bridge (33) in the '301 Patent. (*See* Doc. 64, pp. 27–31, ¶¶ 27–29). Beretta contends that his opinions are speculative and conclusory for several reasons. According to Beretta, the drawings referenced by Mr. Byron do not show contact between the disconnect pin and the barrel in the Pico; Mr. Byron does not explain how the disconnect pin "locks" the barrel; and Mr. Byron does not address how the bridge (33) in the '301 Patent functions, which "begs the question of exactly how Byron can reach his conclusion that the unknown and unexplained function of bridge 33 in the '301 patent functions in substantially the same way to achieve the same result as the Pico's disconnect pin in locking the barrel in the barrel slide." (Doc. 73, pp. 10–11). The Court disagrees with Beretta's assertion that these paragraphs are conclusory and speculative testimony.

Mr. Byron explains why he believes that the disconnect pin locks the barrel in the barrel slide in the Pico by referencing diagrams, photographs, and the Pico

instruction manual. The fact that an illustration shows the disconnect pin not touching barrel attachments does not render conclusory Mr. Byron's expert opinion, with explanation, that the disconnect pin nevertheless locks the barrel in the barrel slide. And Mr. Byron does not need to provide greater detail about the bridge (33) in the '301 patent to render a non-speculative opinion as to structural equivalence; his reference to the language of the claim limitation, together with his analysis, suffices to support his opinion that the Pico disconnect pin is equivalent to that language.

Finally, Beretta contends that the alleged infirmities of paragraphs 21–22 and 26–29 render conclusory Mr. Byron's testimony in paragraph 5: "I matched the elements and/or limitations of Claim 1 of the '301 Patent to the structural components in Beretta's Pico pistol. Based upon my analysis, I find that all the elements and/or limitations in Claim 1 of the '301 Patent are literally present in the Beretta Pico pistol." (*See* Doc. 64, p. 2, ¶ 5; Doc. 73, pp. 11–12). But, as explained above, paragraphs 21–22 and 26–29 contain sufficient factual support, so Mr. Byron's summation of his opinions in paragraph 5 is not simply conclusory.

Therefore, the Court overrules Beretta's objections to Mr. Byron's declaration.

B. "Means for supporting the trigger mechanism"

The Court construed the claim limitation "means for supporting the trigger mechanism" as a means-plus-function limitation with the following function and structure:

> The claimed function is supporting the trigger mechanism.
>
> The corresponding structure for the claimed function, with reference to Figures 1-6 of the '301 Patent, is:
>
> - a bearing pin (21) for mounting a trigger (20), which is inserted in the multifunction part (10);
> - a pin (23) for supporting the spring of a trigger safety device (22), which is mounted in multifunction part (10);
> - a pin (24) for supporting another moving part (for example another safety device), which is mounted in multifunction part (10);
> - a pivoting pin (25) inserted or mounted in the rear part of the multifunction part (10);
> - a guide (27) for a release lever (26), which is formed on the multifunction part (10); and
> - various holes provided in the two side parts (30, 31) of the multifunction part (10), to be precise a hole (38) for the bearing pin (21), a hole (39) for the pin (23), a hole (40) for the other pin (24) in the front part and, in the rear part, a hole (41) for the pivoting pin (25) and a hole (42) for a further part of the trigger mechanism;
> - and equivalents thereof.

(Doc. 40, pp. 22–23).

Under the first element of the test for literal infringement, a genuine dispute of material fact exists as to whether the Pico contains a structure that performs the identical function of supporting the trigger mechanism as recited in the Court's

construction of the '301 Patent. The Pico trigger mechanism includes at least a trigger, a trigger bar, and a trigger spring. (Doc. 46-7, p. 2; Doc. 64, pp. 10, 16, ¶¶ 16, 21; Doc. 64-2, pp. 52–53). The trigger spring is seated on the trigger bar. (Doc. 46-7, p. 2; Doc. 64-2, pp. 39–40). The trigger bar attaches to the bottom of the chassis. (Doc. 46-7, p. 2; Doc. 64-2, p. 40). Mr. Byron testified that the trigger bar in the Pico forms the release lever in the trigger mechanism, rides on a lower guide surface of the chassis, and has a guide for a release lever. (Doc. 64, pp. 16–18, ¶ 21). And one pin inserted through one corresponding hole mounts the trigger to the chassis. (Doc. 46-6, p. 2; Doc. 46-7, p. 2; Doc. 46-12, p. 5, ¶ 9; Doc. 64-2, pp. 40, 52–53). As such, this evidence could support a reasonable inference that a pin mounted in a hole in the chassis and a guide formed on the chassis performs the identical function of supporting the trigger mechanism.

On the other hand, Mr. Kellogg testified that the Pico chassis does not have a guide for a release lever that supports the trigger mechanism. (Doc. 72-1, p. 10, tpp. 50, 52). Mr. Kellogg testified that the rippled portion at the back of the Pico chassis provides "clearance to allow the trigger bar to engage the hammer," which is a function not identical to securing the trigger mechanism. (Doc. 72-1, p. 10, tp. 50). So a genuine dispute of material fact exists as to identity of function between the Pico and the '301 Patent.

Under the second element of the literal infringement analysis, a genuine dispute of material fact exists as to structural equivalence between the means of securing the trigger mechanism in the Pico and in the '301 Patent. Reasonable jurors could find that the single pin and its corresponding hole in the Pico and the pins and holes in the '301 Patent perform the same function—securing the trigger mechanism—in the same way—inserting a pin through corresponding holes—to produce the same result—a trigger mechanism mechanically secured to a multifunction metal part. Mr. Byron testified that the trigger bar in the Pico "forms the release lever in the Pico trigger mechanism, rides on a lower guide surface of the chassis, and has a 'guide for a release lever,'" which, according to Mr. Byron, secures the trigger mechanism in the substantially same way as the "guide (27) for a release lever (26), which is formed on the multifunction part (10)" in the Court's construction of the '301 Patent. (Doc. 64, pp. 16, 18–20, ¶¶ 21–22). So the evidence supports a reasonable inference of structural equivalence to satisfy the second element of the test for literal infringement.

This is so despite the fact that the Pico uses only one pin and corresponding hole, while the Court's construction of the '301 Patent structure for supporting the trigger mechanism includes at least four pins and five holes: "a hole (38) for the bearing pin (21), a hole (39) for the pin (23), a hole (40) for the other pin (24) in the front part and, in the rear part, a hole (41) for the pivoting pin (25) and a hole (42)

for a further part of the trigger mechanism." (Doc. 40, p. 23).[1] Reasonable jurors could find that the difference in the number of pins and holes is insubstantial because the difference derives from the relative complexities of the trigger mechanisms in the two devices, not from a substantial difference in the *way* the corresponding structures support the trigger mechanism. The Pico's relatively simple trigger mechanism consists of only a trigger, trigger bar, and trigger spring; it lacks the limitation's spring of a trigger safety device, release lever, and "another moving part (for example another safety device)." (Doc. 40, p, 23; Doc. 64, pp. 10, 16, ¶¶ 16, 21; Doc. 64-2, pp. 39–40, 52–53). Regardless, the function, way, and result of the corresponding structures that support the trigger mechanism—as opposed to the different components of the trigger mechanisms themselves—remain insubstantially different. Again, Steyr's evidence shows that both the limitation and the Pico use pins, holes, and a guide to support the trigger mechanism. Reasonable jurors could find that the different number of pins and holes does not change the function, way, or result, and thus does not render the structural differences substantial.

[1] Beretta, supported by Mr. Kellogg's analysis of the '301 Patent, contends that the Court's construction of the limitation requires five pins. (*See* Doc. 46-4, p. 2; Doc. 46-5, p. 2; Doc. 48, p. 23). But the Court's construction identifies four parts as "pins": the bearing pin (21), the pin (23), the other pin (24), and the pivoting pin (25). (Doc. 40, pp. 22–23). The Court's Claim Construction Order does not explicitly identify "a further part of the trigger mechanism" or "the trigger safety device (22)" as a pin. Whether the limitation requires four or five pins ultimately is immaterial to the Court's analysis.

Also, Mr. Byron testified that "[w]hether you use one pin to support a simple trigger mechanism or a number of pins to support a more complicated trigger mechanism would be obvious to a person skilled in designing a pistol and is nothing more than an insubstantial difference." (Doc. 64, p. 20, ¶ 22). Reasonable jurors could credit Mr. Byron's testimony to support an inference that the difference between the numbers of pins and holes in the corresponding structures does not preclude a finding of structural equivalence.

And, contrary to Beretta's argument, patent prosecution history does not demonstrate that the patent applicant specifically disavowed means for supporting a trigger mechanism utilizing one pin and one hole. True, the examiner rejected the original and first amended application as anticipated by a prior patent, U.S. Patent No. 5,669,169 (Schmitter), which describes a handgun with a trigger mechanism mounted with one pin and one hole. (Doc. 46-3, pp. 6, 23–24, 38). But no evidence shows that the examiner rejected the application—or that the applicant amended the application—because of the number of pins and holes in the prior art. Indeed, no language in the examiner's rejections or the applicant's amendments demonstrate an issue with the number of pins and holes.

And, contrary to Beretta's assertion, the Pico's lack of a "first safety device," a "[s]econd safety device or other moving part," and a "release lever"—assuming the Pico does lack such components—has no bearing on structural equivalence for

purposes of Steyr's literal infringement claim. (*See* Doc. 48, p. 23). True, the Court's construction of the limitation includes pins and holes that mount "the spring of a trigger safety device" and "another moving part (for example another safety device)," and a guide for a "release lever." (Doc. 40, p. 23). But, as the Court stated in its Claim Construction Order, the "Federal Circuit has indicated that the item that is acted upon in a means-plus-function claim limitation cannot be part of the structure that performs the action." (Doc. 40, p. 16) (citing *Northrop Grumman Corp. v. Intel Corp.*, 325 F.3d 1346, 1352 (Fed. Cir. 2003)). Based on this rule, the Court found that the trigger safety devices and the release lever themselves—as opposed to the pins, holes, and guide that mount such components—should not be included in the construction of the "means for supporting the trigger mechanism" claim limitation. (Doc. 40, p. 17).

On the other hand, Beretta's evidence could support a finding of structural inequivalence. Even though reasonable jurors could find that the difference in the number of components between the Pico and the claim limitation does not defeat functional identity, reasonable jurors instead could find that the difference in the number of components defeats structural equivalence. Mr. Kellogg testified that the Pico lacks the limitation's "first safety device and respective hole and pin 39, 23 for supporting the first safety device"; "second safety device or other moving part and respective hole and pin 40, 24 in both front and rear parts for supporting the second

safety device or other moving part"; "hole 41 for a pivoting pin 25"; "hole 42 for a further part of a trigger mechanism"; and "guide 27 and . . . release lever 26, which is formed on multifunction part 10." (Doc. 46-12, p. 5, ¶ 9) (emphasis omitted). Reasonable jurors could credit Mr. Kellogg's testimony that an equivalent structure for supporting the trigger mechanism must have these component parts, and consequently find that the Pico lacks structural equivalence. Reasonable jurors also could infer from the notable difference in number of component parts alone that structural equivalence does not exist.

Further, Beretta's evidence could support a finding that the Pico lacks a "guide . . . for a release lever . . . which is formed on the multifunction part" equivalent to the corresponding structure in the limitation. As stated above, Mr. Kellogg testified that the rippled portion on the bottom of the back end of the Pico chassis—which Mr. Byron identified as the equivalent guide for a release lever formed on a multifunction part—is *not* a guide. (Doc. 72-1, p. 10, tpp. 50–52). Mr. Kellogg testified that the rippled portion provides "clearance to allow the trigger bar to engage the hammer." (Doc. 72-1, p. 10, tp. 50). He testified that the rear end of the trigger bar does not ride along or engage the rippled portion. (Doc. 72-1, p. 10, tpp. 50, 52). So the contrasting testimony of Mr. Kellogg and Mr. Byron shows a genuine dispute of material fact as to whether the Pico has an equivalent "guide . . . for a

release lever . . . which is formed on the multifunction part," and that genuine dispute of material fact precludes summary judgment.

C. "The multifunction metal part includes control means for locking said barrel in the barrel slide"

The Court construed the claim limitation "the multifunction metal part includes control means for locking said barrel in the barrel slide" as a means-plus-function limitation with the following function and structure:

> The claimed function is locking the barrel in the barrel slide.
>
> The corresponding structure for performing the claimed function, with reference to Figures 1-6 of the '301 Patent, is:
>
> > a bridge (33) that connects the right-hand and left-hand sides (30, 31) of the multifunction metal part (10) and that engages, or interacts with, the control attachments (4) on the barrel (3) to lock the barrel in the barrel slide, and equivalents thereof.

(Doc. 40, p. 29).

Under the first element of the test for literal infringement, reasonable jurors could find that either the removable disconnect pin or the removable disassembly pin, or both, in the Pico performs the identical function of locking the barrel in the barrel slide. Beretta's description of the Pico's cam-ramp, tilt-barrel, short recoil system—a system that momentarily and slightly tilts down the barrel during recoil before feeding the next cartridge from the magazine—illustrates how reasonable jurors could make such an inference. A removable disconnect pin and a removable disassembly pin both connect the right-hand and left-hand sides of the Pico chassis.

(Doc. 46-10, p. 2; Doc. 46-11, pp. 33–35, 39–41, 52–53). The removable disconnect pin is inserted through a hole in the chassis; when the Pico is fully assembled, the disconnect pin is situated behind a barrel cam attachment formed on the bottom of the barrel. (Doc. 46-10, p. 2; Doc. 46-11, pp. 39–41, 52–53; Doc. 64, pp. 28–29). The removable disassembly pin is inserted through a hole in the plastic grip housing and a hole in the chassis; when the Pico is fully assembled, the disassembly pin is situated in front of the barrel cam attachment. (Doc. 46-10, p. 2; Doc. 46-11, pp. 33–35, 52–53; Doc. 64, pp. 28–29).

After the Pico is fired, recoil energy causes the barrel and the barrel slide to move rearward. (Doc. 46-10, p. 2; Doc. 46-11, pp. 17–18). After a short moving distance, the removable disconnect pin makes contact with the barrel cam attachment formed on the bottom of the barrel and forces the barrel down, which disengages the barrel from the slide while the slide continues its rearward movement. (Doc. 46-10, p. 2; Doc. 46-11, p. 18). As such, the removable disconnect pin provides a rearward stop and a rotation point for rearward travel of the barrel while opening. (Doc. 64, p. 28).

A recoil spring then forces the slide forward. (Doc. 46-10, p. 2; Doc. 46-11, p. 18). The forward movement of the slide and the contact between the barrel cam attachment and the disconnect pin raises the barrel back into its locked position in the slide, and the barrel moves forward with the slide. (Doc. 46-10, p. 2; Doc. 46-

11, p. 18). The barrel cam attachment then becomes wedged against the removable disassembly pin and a top portion of the barrel that has a chamber hood locking into a portion of the slide. (Doc. 46-10, p. 2; Doc. 46-11, p. 18). As such, the removable disassembly pin provides a forward stop of the barrel. (Doc. 64, p. 29). And when the barrel slide rests at its forward position, the removable disconnect pin provides vertical location for the barrel. (Doc. 64, p. 29).

Based on this evidence of the Pico's recoil operation, reasonable jurors could find that one of the removable disconnect pin's functions is to lock the barrel in the barrel slide. By interacting with the barrel cam attachment, the disconnect pin stops the barrel's rearward movement when the slide moves rearward, lifts the barrel back into the slide when the slide moves forward, and then provides vertical location for the barrel in the slide.

Likewise, reasonable jurors could find that one of the removable disassembly pin's functions is to lock the barrel in the barrel slide. By interacting with the barrel cam attachment, the disassembly pin stops the barrel's forward movement in the slide when the slide moves forward.

On the other hand, the evidence could support a finding that neither the removable disconnect pin nor the removable disassembly pin functions to lock the barrel in the barrel slide. When the Pico's slide rests at its forward position, the contact between the disconnect pin and the barrel cam attachment provides vertical

location at the rear of the barrel. (Doc. 64, p. 29). Reasonable jurors could find that providing vertical location for the rear of the barrel does not "lock" the barrel in the slide.

Similarly, reasonable jurors could find that the disconnect pin does not lock the barrel in the slide during movement of the slide. By providing the tilting point for the rear of the barrel when the slide moves rearward, the disconnect pin momentarily disengages the barrel from the slide, akin to "unlocking" as opposed to "locking." And though the disconnect pin aids in reengaging the barrel with the slide when the slide moves forward, reasonable jurors could find that this function is not identical to "locking" the barrel in the slide.

Also, reasonable jurors could identify the chamber hood of the Pico barrel as the structure that locks the barrel in the barrel slide. When the barrel rests at its forward position, the chamber hood locks into the ejection port opening of the slide. (Doc. 46-10, p. 2; Doc. 64, p. 29). Mr. Luther's description of the recoil operation seems to suggest that the chamber hood remains locked into the opening of the slide while the slide moves rearward, unlocks only when the barrel tilts down, and then locks again while the slide moves forward. (*See* Doc. 46-10, p. 2). No evidence shows that the disassembly pin, unlike the chamber hood until the barrel tilts, performs any locking function while the slide moves.

Thus, the competing evidence of the functions of the removable disconnect pin and the removable disassembly pin shows a genuine dispute of material fact as to whether the Pico has a structure that performs the identical function of "locking the barrel in the barrel slide" under the first element of the literal infringement analysis.

Turning to the second element of the literal infringement analysis, a genuine dispute of material fact exists as to structural equivalence between corresponding structures that lock the barrel in the barrel slide. Tracking the language of the Court's construction of the claim, the disconnect pin and the disassembly pin in the Pico "connects the right-hand and left-hand sides . . . of the multifunction metal part." The disconnect pin and the disassembly pin "engages, or interacts with, the control attachments . . . on the barrel"; the disconnect pin engages with the rear of the barrel cam attachment, and the disassembly pin engages with the front of the barrel cam attachment. And, as explained above, evidence supports a reasonable inference that the disconnect pin and the disassembly pin "lock the barrel in the barrel slide" in substantially the same way as the limitation by engaging with the barrel cam attachment during movement or forward rest of the slide.

But the claim first requires the equivalent structure to be a "bridge." Beretta contends that neither the disconnect pin nor the disassembly pin is an equivalent "bridge" because the pins are removable. (Doc. 48, pp. 12–13, 28–31). Beretta

asserts that an equivalent bridge, by definition, may not be removable because the '301 Patent summary states: "In the case of a pistol having a barrel which can be locked in the barrel slide, the invention achieves a further simplification in that the control means for locking are *formed on the multifunction part*." (Doc. 46-2, p. 6) (emphasis added). Control means for locking that can be removed from the multifunction part, according to Beretta, are not "formed on the multifunction part."

The Court addressed Beretta's similar argument in the Court's Claim Construction Order. (*See* Doc. 40, pp. 27–28). Beretta argued that being *formed on* the multifunction part means that the bridge "'cannot be a separately added piece[] or part[],' and instead must be part of a 'unitary 'multifunction metal part' formed as one piece with barrel locking structure and function.'" (Doc. 40, p. 27) (quoting Doc. 30, pp. 19–20). The Court found that Beretta's argument suggested that the multifunction metal part and the bridge must be formed from a single piece of metal. (Doc. 40, p. 27). The Court found this interpretation at odds with the description of the invention in the '301 Patent, which provides that "[t]he multifunction part 10 can be produced in various ways, . . . [including] by welding individual parts together . . . ." (Doc. 40, p. 28). So the Court found that the bridge and the multifunction metal part did not have to be a "unitary piece formed from a single piece of metal." (Doc. 40, p. 28).

But the Court did not find that welding was the exclusive alternative. After all, the claim limitation does not specifically restrict how the bridge is included in or attached to the multifunction part. And the claim limitation does not provide that the control means for locking must be "formed on" the multifunction part. Instead, the corresponding structure is a "bridge . . . that connects the right-hand and left-hand sides . . . of the multifunction metal part . . . , and equivalents thereof." (Doc. 40, p. 29). Reasonable jurors could find that the removability of the disconnect pin and the disassembly pin is an insubstantial difference from the limitation, and is thus an "equivalent[] thereof" under the limitation.

Also, Beretta's focus on the removability of the disconnect pin and the disassembly pin strays from the § 112, ¶ 6 equivalents analysis. To determine structural equivalence, a factfinder must decide whether the disconnect pin and/or the disassembly pin "function[s] in substantially the same *way* to achieve substantially the same *result* as the corresponding structure described in the specification." *See Odetics*, 185 F.3d at 1267 (emphasis added). Whether the disconnect pin and/or the disassembly pin is formed from the same piece of metal as the multifunction part, welded to the multifunction part, or removably inserted through holes in the multifunction part, does not change the *way* the disconnect pin and the disassembly pin achieves the *result* of locking the barrel in the barrel slide. In other words, the way the equivalent bridge is included in or attached to the

multifunction part does not substantially change the way the equivalent bridge performs its function. So, again, reasonable jurors could find that the removability of the disconnect pin and the disassembly pin is an insubstantial difference between the Pico and the bridge in the limitation. Thus, a genuine dispute of material fact exists as to structural equivalence for the "multifunction metal part includes control means for locking said barrel in the barrel slide" limitation.

IV. Conclusion

For the foregoing reasons, by separate order, the Court will deny Steyr's motion for summary judgment and deny Beretta's motion for summary judgment.

DONE and **ORDERED** this May 28, 2020.

Madeline H. Haikala

MADELINE HUGHES HAIKALA
UNITED STATES DISTRICT JUDGE